

REPLACEMENT SHEET

1/15

FIG. 1

Sequence	MB DNA (%)	EC DNA (%)	fold (MB/EC)				
GGCGCC=	0.1462	0.0020	73.12	GGCGCC=	0.2386	0.0654	3.58
GCGGCG=	0.2317	0.0062	37.19	GCGGCG=	0.1008	0.0296	3.41
GTCGAC=	0.0890	0.0116	8.56	GCGGGC=	0.2237	0.0662	3.38
CTCGAG=	0.0239	0.0038	7.96	GCGGGT=	0.1302	0.0402	3.24
CCCCGG=	0.0645	0.0091	7.13	CCCGGG=	0.1183	0.0365	3.24
CACGTG=	0.0205	0.0030	6.74	GACGGC=	0.1033	0.0327	3.16
CCCGGAC=	0.0451	0.0069	6.58	CCCGGC=	0.0624	0.0263	3.13
CTCGGG=	0.0382	0.0068	5.75	GCGGGG=	0.1165	0.0373	3.13
GCGGAC=	0.1435	0.0297	4.83	ACCGGG=	0.1242	0.0405	3.07
GTCGGC=	0.1400	0.0285	4.74	GCGGGG=	0.0382	0.0223	3.04
CTCGGC=	0.1021	0.0217	4.71	CCCGCC=	0.0395	0.0229	3.02
GCGGAG=	0.1000	0.0218	4.58	GCGGGT=	0.1117	0.0372	3.00
GACGAG=	0.0493	0.0120	4.10	ACCGCG=	0.1090	0.0368	2.97
GCCCGC=	0.1781	0.0435	4.09	ACCGAG=	0.0511	0.0175	2.92
GACGTC=	0.0619	0.0151	4.09	GTCGGA=	0.0331	0.0118	2.80
GTCGAG=	0.0677	0.0166	4.08	GCGCAC=	0.1005	0.0360	2.80
GTCGTC=	0.0755	0.0192	3.93	CTCGGT=	0.0494	0.0178	2.78
CTCGAC=	0.0843	0.0165	3.90	GTCGCC=	0.1056	0.0383	2.76
CCCGAC=	0.0676	0.0175	3.86	GTCGCG=	0.0884	0.0323	2.74
CTCGTC=	0.0601	0.0130	3.86	CACGTC=	0.0430	0.0158	2.73
CACGGC=	0.1751	0.0455	3.85	TCCGAC=	0.0326	0.0121	2.70
GTCGGG=	0.0627	0.0165	3.79	CGCGAC=	0.0862	0.0320	2.66
TCCGAG=	0.0003	0.0054	3.78	Average	0.0498	0.0288	
GACGAC=	0.0747	0.0199	3.76	Sum	12.7440	7.3665	
CTCGGA=	0.0202	0.0054	3.73				

REPLACEMENT SHEET

2/15

FIG. 2

a)

SEQUENCE ID No.:		
MB-ODN 4/5 (-CGXXCGXXXCG-)		
No.	Sequence	Score
1	CTCCAcqGGcqGCAcqGCCA	11811
2	TGTCCTcqGGcqGCAcqGTG	11773
3	CRAGGcqGTCqGGCTcqHTGG	11538
4	ARCTGcqGAcgTGGcqGCAG	10931
5	GTCRGeqGAcqTGGcqGCCTC	10829
6	AAAGGcgTGeqGGTcqGCC	10697
7	CTCRGeqGGcqGCAcqTGCA	10670
8	CACAAcqGGcqGCCTcqGCCT	10319
9	ATGAAcqGGcqGCCTcqAGCC	10240
10	GATGGcqATcqGCAcqCCCC	10199
11	CAGGAcqTGeqTGeqGCAT	9962
12	GCTGGcqGGcqAGGcqATT	9855
13	TGTTGcqCTcqGCTcqGCAG	9839
14	GGTNGcqGTCqAGGcqCTGT	9728
15	GGTNGcqCAGcqGCCTcqGCC	9259
16	GGGGGcqGTCqGCCTcqCTRA	9250
17	GAAGATcqGTCqGUAcqTCAG	9038
18	CCAGTcqGGcqGGGcqCTTG	9022
19	TCTGGeqGTCqAGGcqGCC	8853
20	CAACTcqATcqGGcqGCCA	8878
21	TTTGGeqGTCqGTGcqGAGC	8869
22	CCAGGcqGTCqGTGcqGAGG	8869
23	CTCCTcqGTCqAGGcqGTG	8844
24	ACCATcqGGcqCCAcqTCTC	8780
25	CAACAcqATcqTGTCqGCTG	8615
333	GTGTTcqAAcqCTAcqACCA	1681
334	ARGTAcqAAcqATGcqAGAA	1637
335	ACTRGcqTAcqCAGcqAATC	1539

b)

SEQUENCE ID No.:		
MB-ODN 5/5 (-CGXXXCGXXXCG-)		
No.	Sequence	Score
1	TGCTcqTGGcqGCTcqGCAG	12868
2	GRGGcqGCAcqGTGcqGCTC	12599
3	TTGGcqGGCAcqCAAcqCTTC	11345
4	GRAGGcqTTGcqGGGcqGCC	11280
5	AAAGGcqTGGcqGGTcqTGG	11258
6	CAAGGcqATGcqGCTcqGTC	10614
7	GTTGcqGGAcqAGTcqGAT	10297
8	GGGGcqGGTcqAGTcqAGCA	10243
9	TGGTcqGGGcqGGTcqAGTC	10153
10	ATCRcqCTAcqGGGcqGCCA	10063
11	GTGGcqGGCAcqAGTcqAGAT	10059
12	AAAGGcqGCAcqCATcqAGTGG	10036
13	GAAGGcqGGGcqGGTcqAGCT	9743
14	ATTTAcqTGGeqGCTcqTGCA	9712
15	CAGGAcqGTGeqGTGcqGAT	9657
16	TAGGcqTTTcqAGTcqGCAC	9655
17	GTGAcqTCAcqGGTcqGCAG	9390
18	GCTTcqAGTcqGCAcqCCAG	9269
19	GTGTcqGGGcqAGGcqACCA	9164
20	TTGGcqTTGcqTGTcqGCCT	9034
21	TCATcqATGcqGGGcqCCAC	8959
22	GRGGcqGGGcqGGGcqGAGA	8873
23	TRGGcqATGcqAGGcqGCCTG	8845
24	CAGGcqGTGeqGCAcqCAGT	8703
25	CTGAcqCTcqGCTcqAGCT	8642
342	ATTAcqCTGcqAAAcqCAGT	1807
343	TAAATcqGAAcqATTAcqATTC	1713
344	CATGcqTAAcqTTAcqGAAA	1219

REPLACEMENT SHEET

3/15

FIG. 3

a)

SEQUENCE ID No.:	
MB-ODN 4/5 (-CGXXCGXXXCG-)	74

ODN	Sequence
MB-ODN4/5-1	CCAGTCGGGGGGGGGGCTGC
MB-ODN4/5-2	GCTGGGGGGGGGGGGGGGATTC
MB-ODN4/5-3	ACCAAGGGGGGGGGGGGGCTG
MB-ODN4/5-4	GCTGGGGGGGGGGGGGGGGATC
MB-ODN4/5-5	GGCAAGGGGGGGGGGGGGGGGG
MB-ODN4/5-6	CTTGGGGGGGGGGGGGGGGGGAA
MB-ODN4/5-7	AACCTGGGGGGGGGGGGGGGGG
MB-ODN4/5-8	GCTGAGGGGGGGGGGGGGGGGG
MB-ODN4/5-9	GGTCAGGGGTGGGATGGGATTC
MB-ODN4/5-10	TTTGGGGGGGGGGGGGGGGGGG
MB-ODN4/5-11	GCTGGGGGGGGGGGGGGGGCTG
MB-ODN4/5-12	TTTGTGGGGGGGGGGGGGGGGAA
MB-ODN4/5-13	GATGTCGGAGGGGGATGGGGAGC
MB-ODN4/5-14	TTGGCTGGAGGGGGGGGGGGAT
MB-ODN4/5-15	TTGGCTGGAGGGGGGGGGGGTG
MB-ODN4/5-16	ACCAATGGGGGGGGGGGGGGGGT
MB-ODN4/5-17	GGCAAGGGGGGGGGGGGGGGGG
MB-ODN4/5-18	CTCATGGGGGGGGGGGGGGGGGG
MB-ODN4/5-19	ATGGCTGGGGGGGGGGGGGGGG
MB-ODN4/5-20	GGCTGGGGGGGGGGGGGGGGGG
MB-ODN4/5-21	GAATGGGGGGGGGGGGGGGGAT
MB-ODN4/5-22	CTTGGGGGGGGGGGGGGGGGG
MB-ODN4/5-23	GAATGTCGGAGGGGGGGGGGG
MB-ODN4/5-24	CTGGTGGATGGGGGGGGGGGG
MB-ODN4/5-25	CTAGGGGGATGGGGGGGGGGGG
MB-ODN4/5-26	CTACAGGGATGGGGGGGGGGGG
MB-ODN4/5-27	CTAGGGGGATGGGGGGGGGGGG
MB-ODN4/5-28	CTACAGGGATGGGGGGGGGGGG
MB-ODN4/5-29	GGCAAGGGGGGGGGGGGGGGAT
MB-ODN4/5-30	TAAAGGGGGGGGGGGGGGGATAT
MB-ODN4/5-31	ACCAAGGGGGGGGGGGGGGGGG
MB-ODN4/5-32	TGTTGGGGGGGGGGGGGGGGTG
MB-ODN4/5-33	CTGGGGGGGGGGGGGGGGGGGG
MB-ODN4/5-34	GGCAAGGGGGGGGGGGGGGGGG
MB-ODN4/5-35	GGCAAGGGGGGGGGGGGGGGGG

b)

SEQUENCE ID No.:	
MB-ODN 5/5 (-CGXXXCGXXXCG-)	110

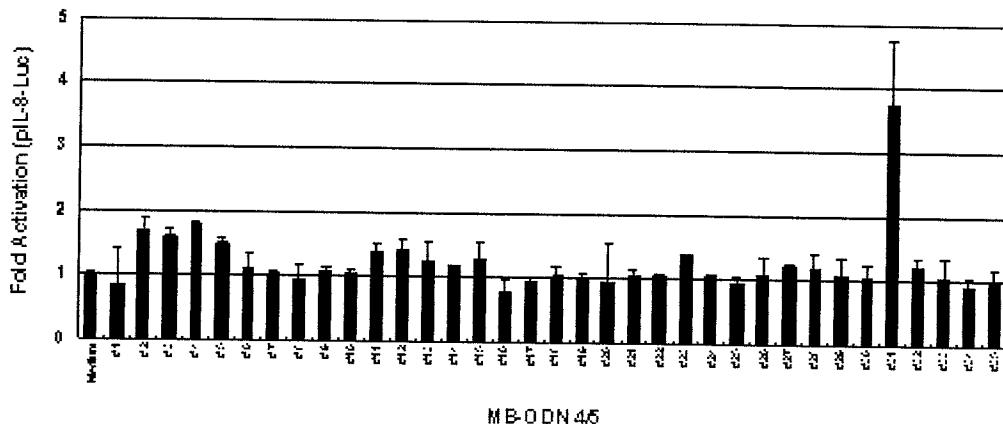
ODN	Sequence
MB-ODN5/5-1	CATGCCCAATGGGGGGGGCTGC
MB-ODN5/5-2	CGAGGGGGTGGGGGGGGGGCTG
MB-ODN5/5-3	GATGCCCTGGGGGGGGGGGGAA
MB-ODN5/5-4	GGGGGGGGGGGGGGGGGGGGCT
MB-ODN5/5-5	GGAGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-6	TGGTCGAAGGGGGTGGGGGGAC
MB-ODN5/5-7	AACGGGGGGGGGGGGGGGGGGAC
MB-ODN5/5-8	TAGGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-9	TGAGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-10	ATCTTCGAAGGGGGTGGGGGGGG
MB-ODN5/5-11	GGGTCGAATGGGGGGGGGGCTG
MB-ODN5/5-12	TAGGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-13	ATGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-14	GGGGTCGAATGGGGGGGGGGCTG
MB-ODN5/5-15	TGGTCGGGGGGGGGGGGGGGGGG
MB-ODN5/5-16	CGAGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-17	GCAATGGGGGGGGGGGGGGGGTG
MB-ODN5/5-18	TGGAGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-19	CTGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-20	TTGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-21	AAAATGGGGGGGGGGGGGGAT
MB-ODN5/5-22	ATGAGGGGGGGGGGGGGGGGG
MB-ODN5/5-23	AAAATGGGGGGGGGGGGGGGG
MB-ODN5/5-24	CTGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-25	TGGGGGGGGGGGGGGGGGGGGAT
MB-ODN5/5-26	TCTGGGGGGGGGGGGGGGGGGCA
MB-ODN5/5-27	TGGGGGGGGGGGGGGGGGGGGAT
MB-ODN5/5-28	GGCTGGGGGGGGGGGGGGGGGG
MB-ODN5/5-29	TTGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-30	GGAGGGGGGGGGGGGGGGGGCTC
MB-ODN5/5-31	AACAGGGGGGGGGGGGGGGGG
MB-ODN5/5-32	AGGAGGGGGGGGGGGGGGGGG
MB-ODN5/5-33	ACTGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-34	GTCGGGGGGGGGGGGGGGGGGGG
MB-ODN5/5-35	GGGAGGGGGGGGGGGGGGGGG
MB-ODN5/5-36	CTGAGGGGGGGGGGGGGGGGG

REPLACEMENT SHEET

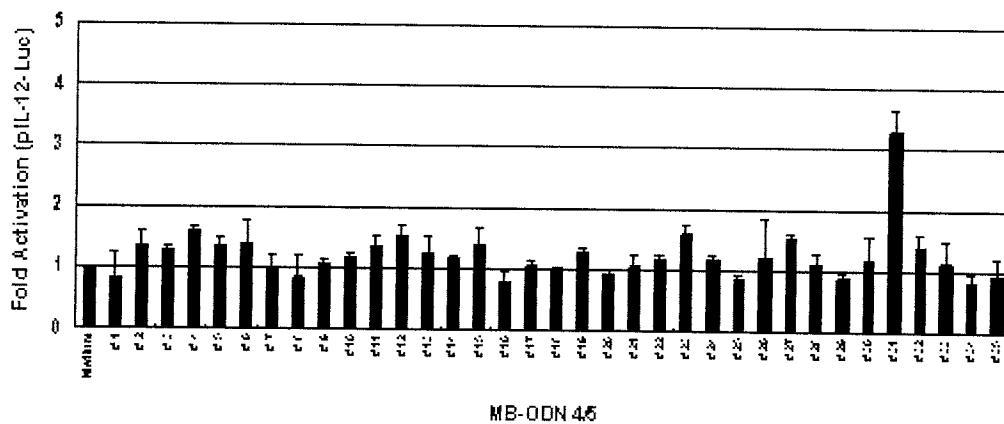
4/15

FIG. 4

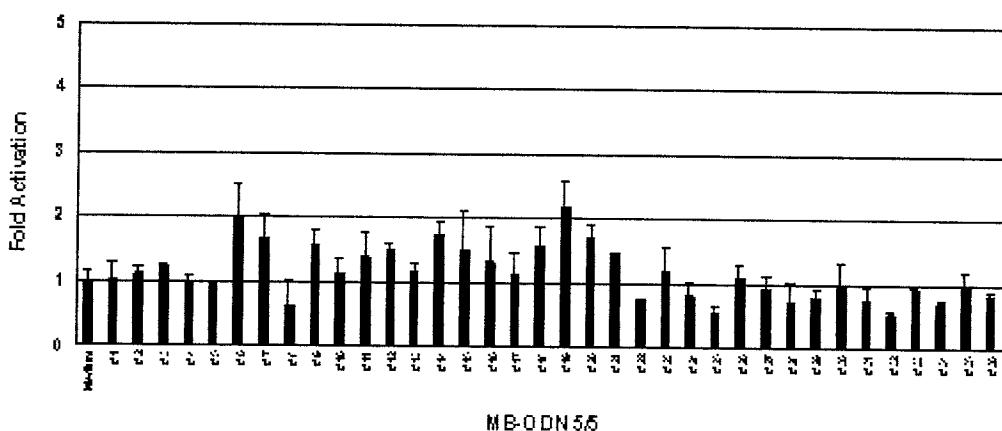
a)



b)



c)



REPLACEMENT SHEET

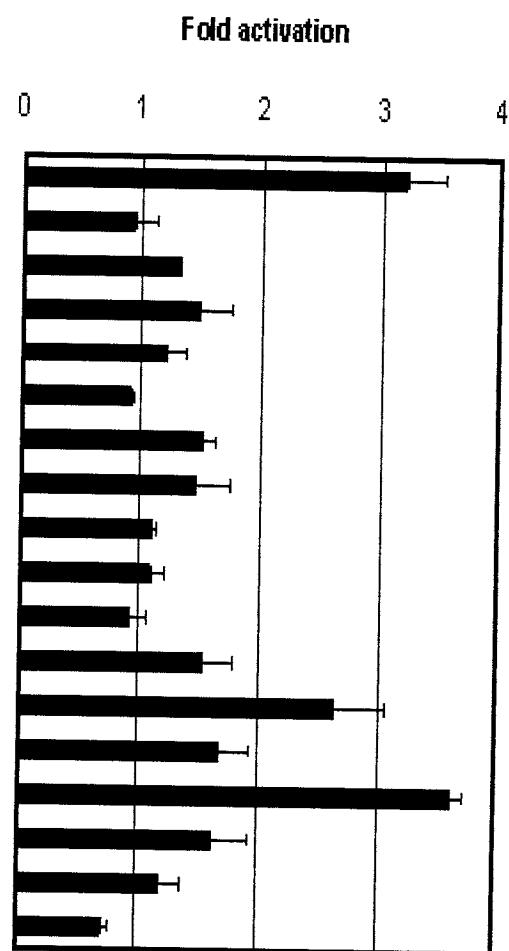
5/15

FIG. 5

a)

ODN	Sequence	SEQUENCE ID No.:
MB 4/5 #31	AGCRGCGTTCGTGTCTGGCCT	147
#31.1	CAGCTCGTTCGTGTCTGGCT	148
#31.2	TGTGGCGTTCGTGTCTGGCT	149
#31.3	TGCACCGTTCGTGTCTGGCT	150
#31.4	GGCCACCGTTCGTGTCTGGTAG	151
#31.5	GAACACCGTTCGTGTCTGGAC	152
#31.6	CAACACCGTTCGTGTCTGGACA	153
#31.7	TATGTCGTTCGTGTCTGGCTT	154
#31.8	ATGGGGCGTTCGTGTCTGGCTTG	155
#31.9	ATTTGCGTTCGTGTCTGGATTC	156
#31.10	GGTGGCGTTCGTGTCTGGCTT	157
#31.11	ATGGGGCGTTCGTGTCTGGATCC	158
#31.12	GTAATTGCGTTCGTGTCTGGCTT	159
#31.13	GGGACACCGTTCGTGTCTGGTGC	160
#31.14	TGACTTCGTTCGTGTCTGGCTTG	161
#31.15	GTCATTCGTTCGTGTCTGGAGAC	162
#31.16	TTGCCACCGTTCGTGTCTGGATGA	163
#31.17	CAGCACACCGTTCGTGTCTGGCTA	164

b)



REPLACEMENT SHEET

6/15

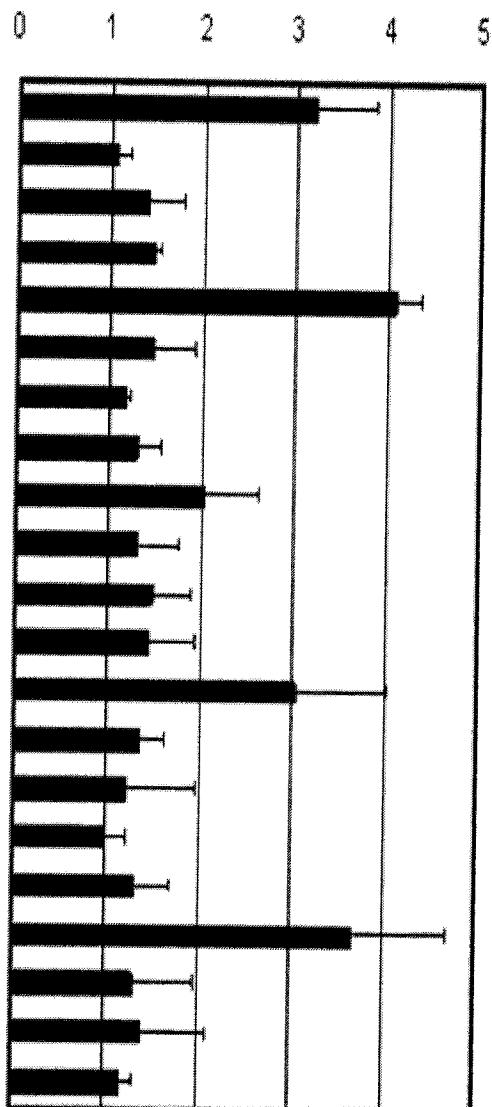
FIG. 6

a)

ODN	SEQUENCE ID No.: Sequence
MB-ODN 31(O)	RGCRGGCTTCGTGTCGGCCT 165
MB-ODN 31(M)	AGCGTT <u>CGT</u> GTC <u>GGC</u> 166
#31-CG-1	AGCA <u>GG</u> CTTCGTGTC <u>GG</u> CCT 167
#31-CG-2	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 168
#31-CG-3	AGCA <u>GG</u> CTTCGTGTC <u>GG</u> CCT 169
#31-CG-4	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 170
#31-CG-5	AGCA <u>GG</u> CTTCGTGTC <u>GG</u> CCT 171
#31-CG-6	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 172
#31-CG-7	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 173
#31-A-1	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 174
#31-A-2	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 175
#31-A-3	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 176
#31-B-1	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 177
#31-B-2	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 178
#31-B-3	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 179
#31-C-1	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 180
#31-C-2	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 181
#31-C-3	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 182
#31-D-1	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 183
#31-D-2	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 184
#31-D-3	AGCA <u>GG</u> CTTGCTGTC <u>GG</u> CCT 185

b)

Fold Activation (pHL-8-Luc)

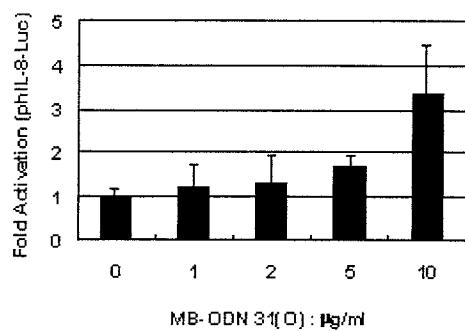


REPLACEMENT SHEET

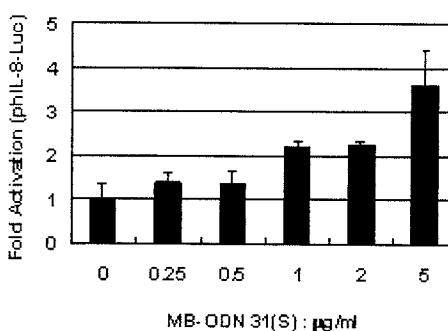
7/15

FIG. 7

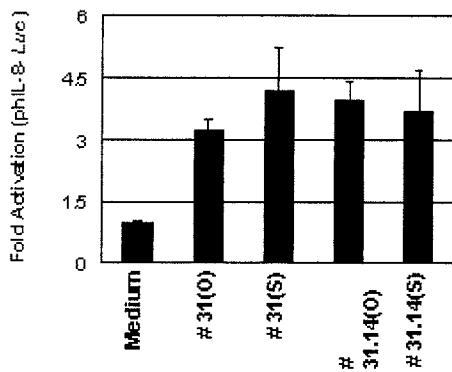
a)



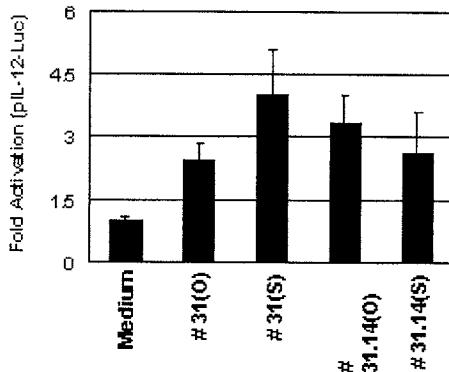
b)



c)



d)

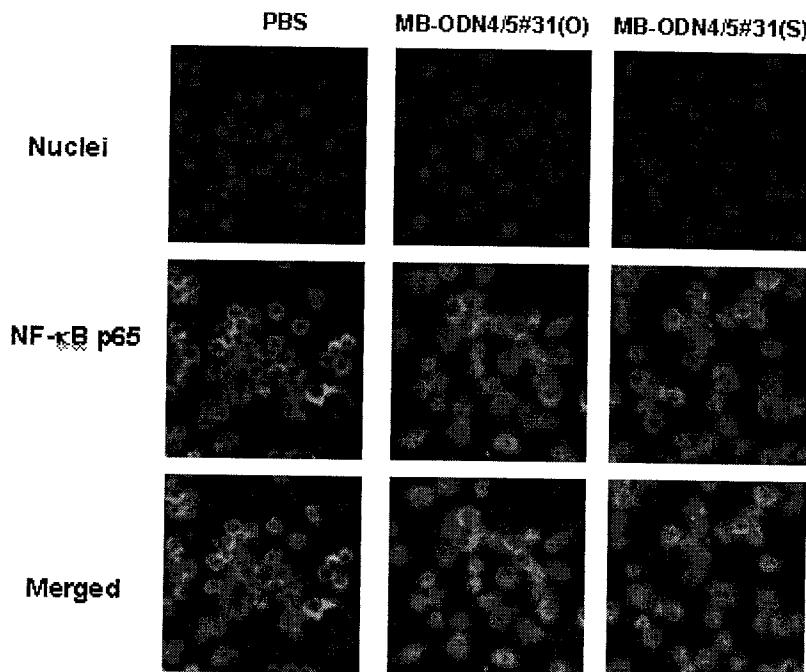


REPLACEMENT SHEET

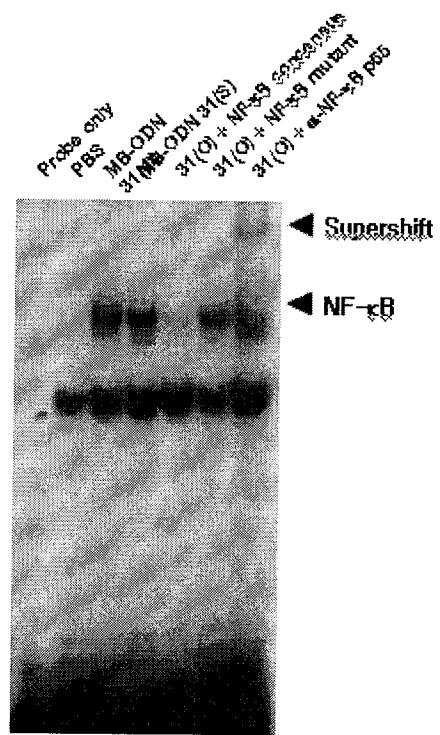
8/15

FIG. 8

a)



b)



REPLACEMENT SHEET

9/15

FIG. 9

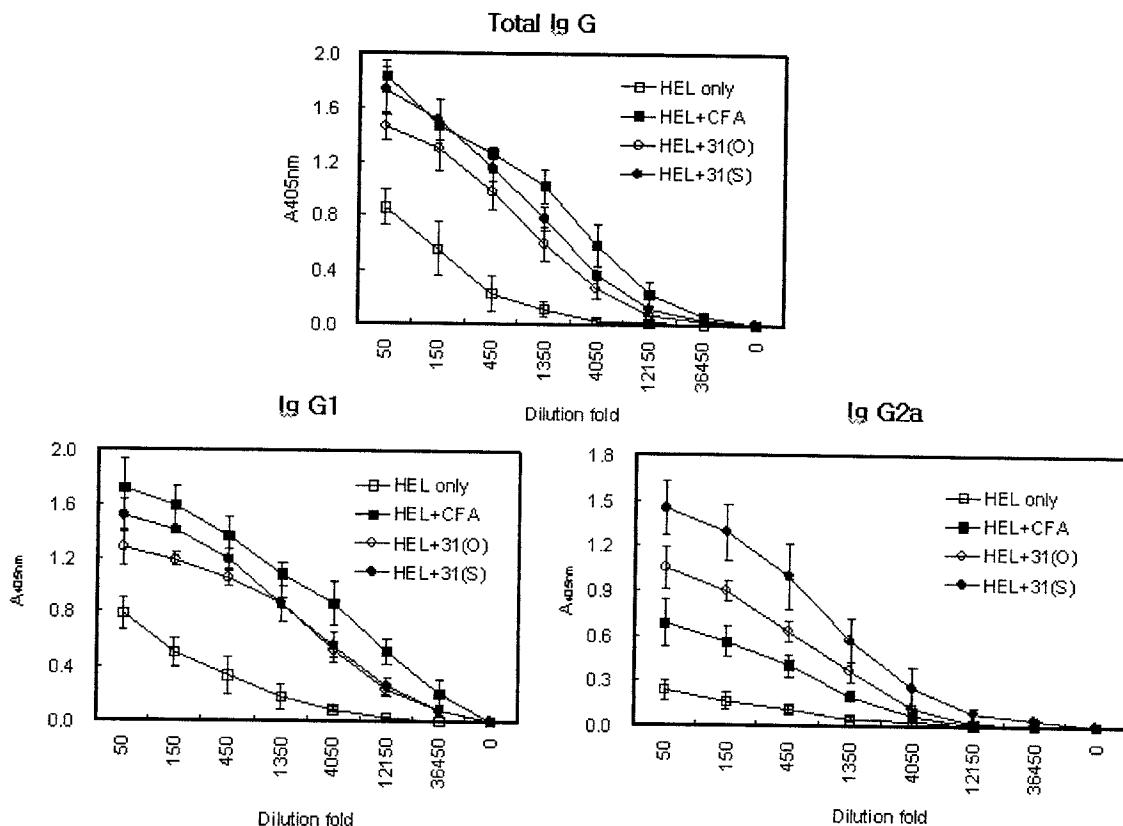
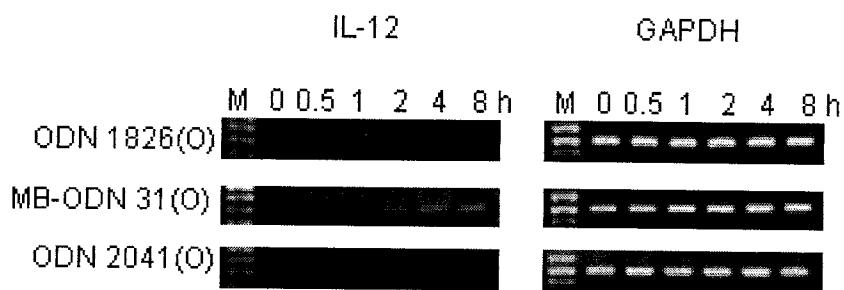


FIG. 10



REPLACEMENT SHEET

10/15

FIG. 11

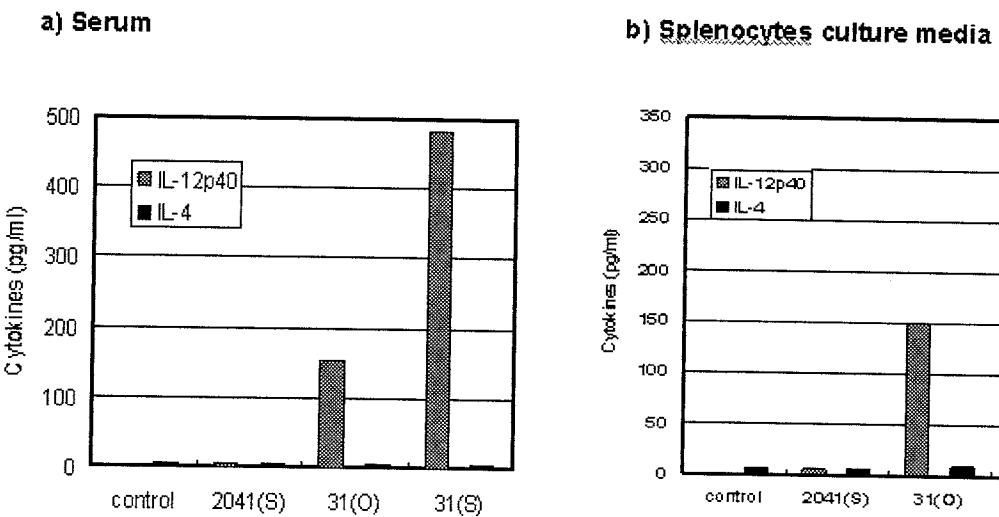
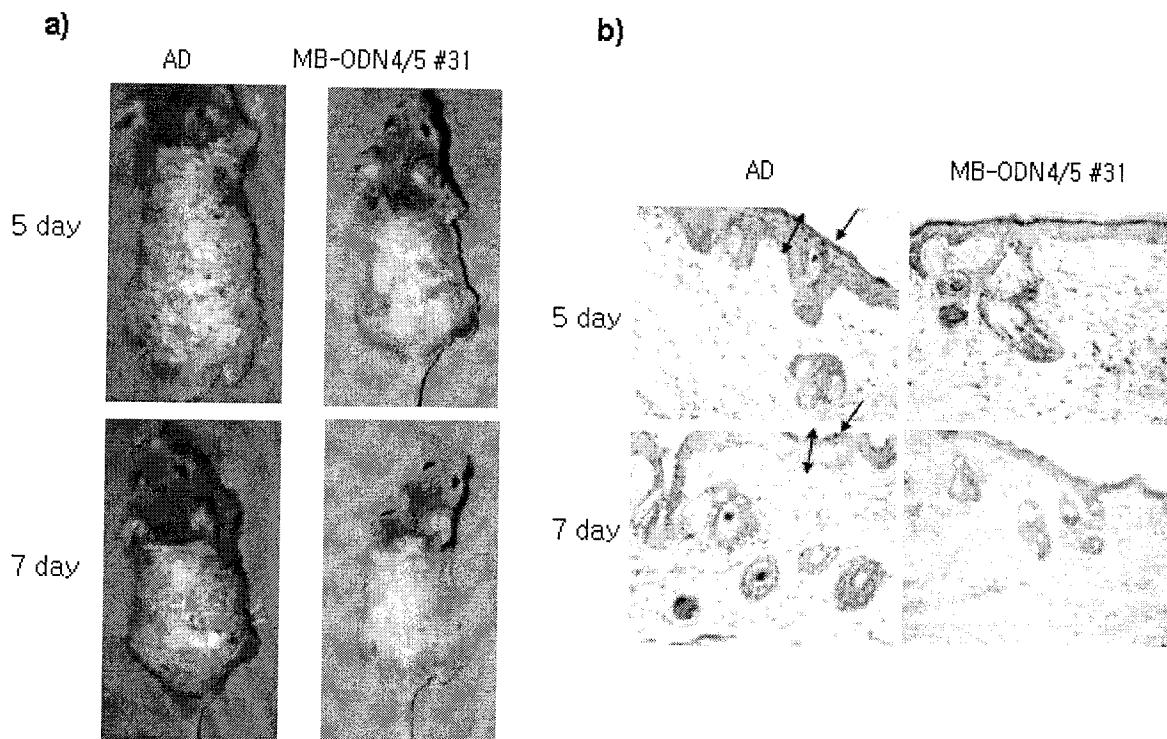


FIG. 12



REPLACEMENT SHEET

11/15

FIG. 13

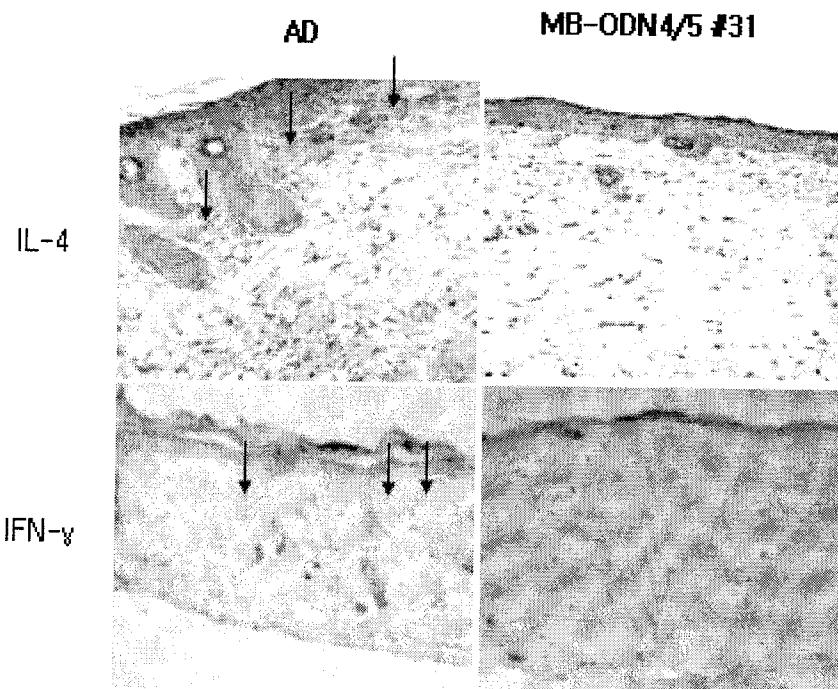
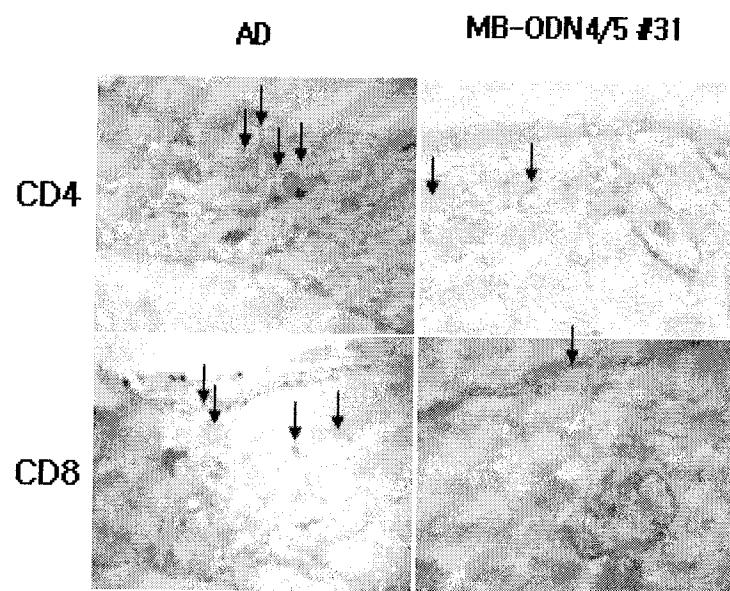


FIG. 14



REPLACEMENT SHEET

12/15
FIG. 15

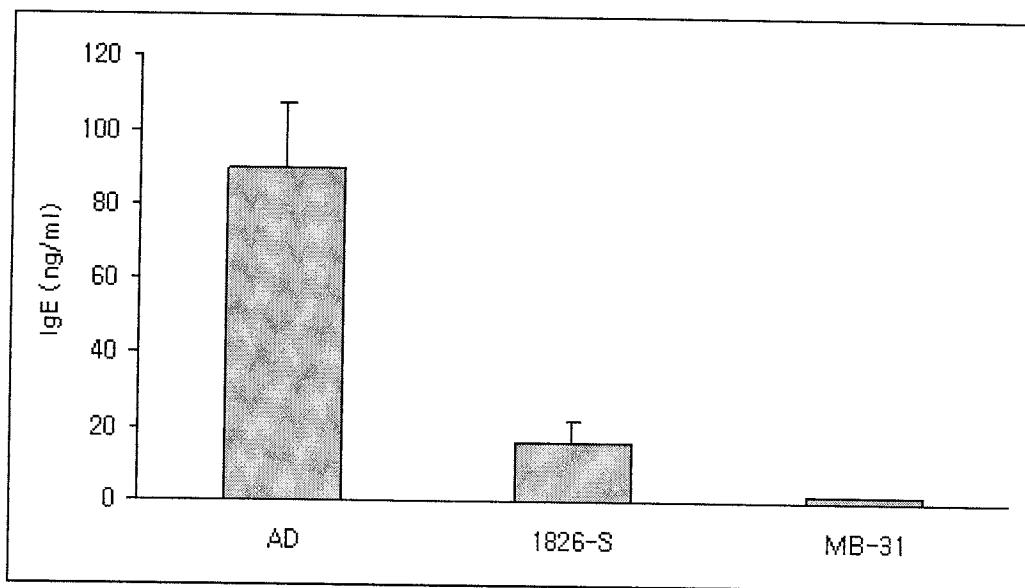
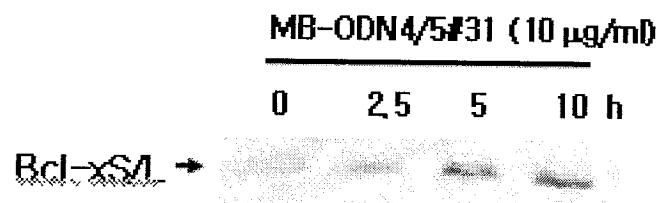


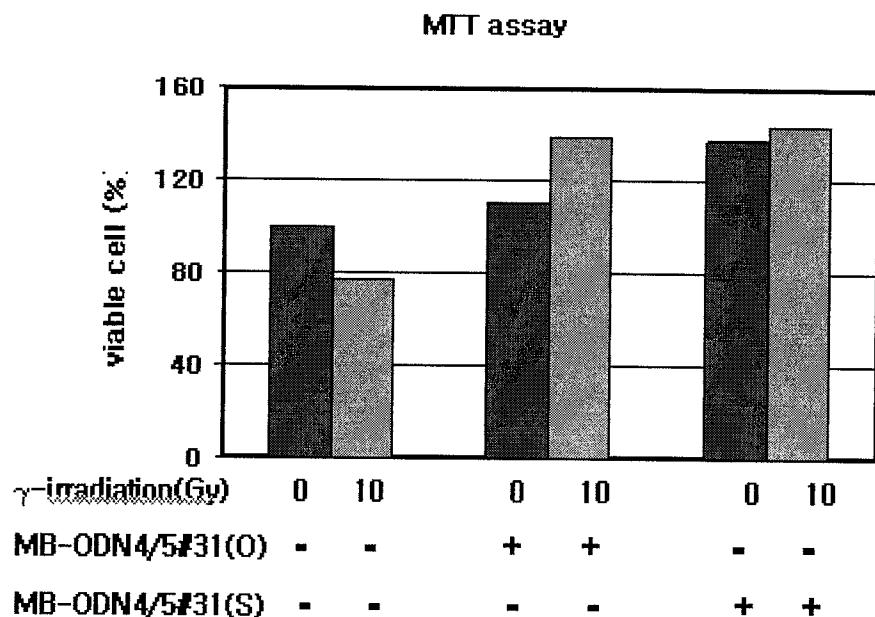
FIG. 16



REPLACEMENT SHEET

13/15

FIG. 17



REPLACEMENT SHEET

14/15

FIG. 18

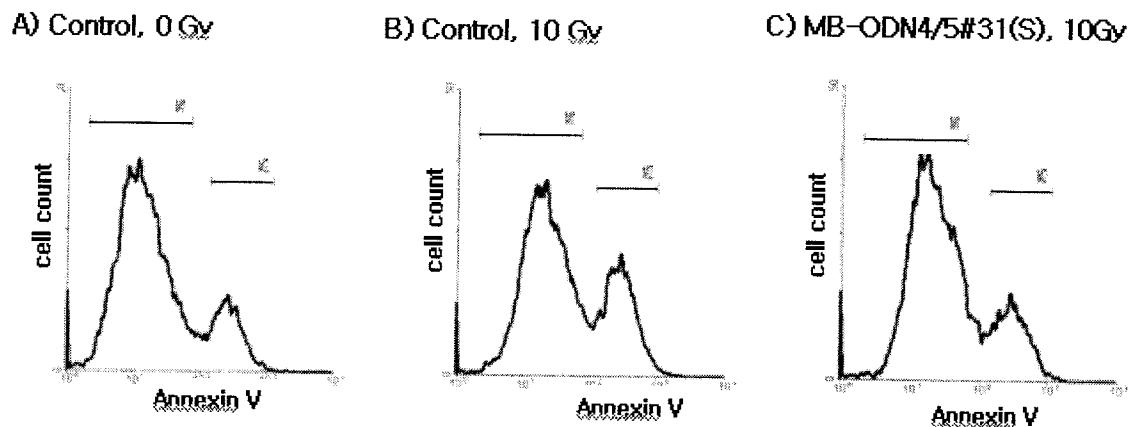


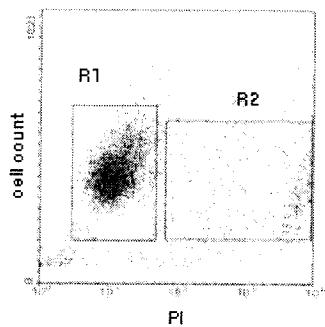
Fig.	γ -irradiation	MB-ODN 4/5 #31(S)	Marker	%Total
A	0 Gy	(-)	M1	73,54
			M2	16,709
B	10 Gy	(-)	M1	58,82
C	10 Gy	(+)	M2	27,24
			M1	65,25
			M2	18,71

REPLACEMENT SHEET

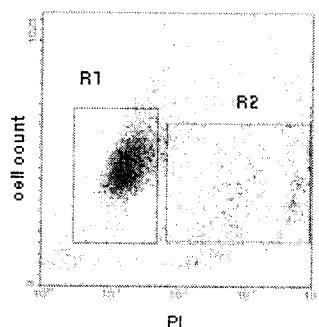
15/15

FIG. 19

A) Control, 0 Gy



B) Control, 10 Gy



C) MB-ODN4/5#31(S), 10Gy

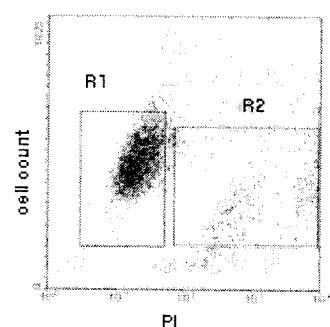


Fig.	γ - irradiation	MB-ODN 4/5 #31(s)	Region	%Total
A	0 Gy	(-)	R1	73,30
			R2	16,32
B	10 Gy	(-)	R1	58,93
			R2	25,33
C	10 Gy	(+)	R1	62,82
			R2	20,92